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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,743	02/27/2004	Stefan Bengt Edlund	ARC920030019US1	8420
61642 7590 01/31/2008 LEONARD T. GUZMAN IBM CORP., LAW DEPT., C4TA/J2B 650 HARRY ROAD SAN JOSE, CA 95120-6099			EXAMINER HO, BINH VAN	
			ART UNIT 2163	PAPER NUMBER
			MAIL DATE 01/31/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/789,743

Applicant(s)

EDLUND ET AL.

Examiner

Binh V. Ho

Art Unit

2163

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/24/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>02/27/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the arguments presented in the Appeal Brief filed 10/24/2007, prosecution on the merits is reopened to address the issues raised in the Brief. The grounds of rejections in the prior Office actions are withdrawn, and new grounds of rejection are presented here. 37 CFR 1.193 (b)(2) applies:

Where prosecution is reopened by the primary examiner after an appeal or reply brief has been filed, appellant must exercise one of the following two options to avoid abandonment of the application:

- (i) File a reply under § 1.111, if the Office action is not final, or a reply under § 1.113, if the Office action is final; or
- (ii) Request reinstatement of the appeal. If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (§ § 1.130, 1.131 or 1.132) or other evidence are permitted.

Response to Arguments

Applicant Argues:

Lipkin and Challenger, alone or in combination, fail to teach or suggest "a cache monitor for ensuring that cached objects are validated when changes to XML data in the data store are detected by the server".

Examiner Responds:

After reconsidering the prior art in light of Applicant's arguments received 10/24/2007, the Examiner agrees with the Applicant that Lipkin and Challenger fails to explicitly teach or disclose creating "a cache for temporarily storing transformed XML data as data objects for later reuse".

However, the Examiner respectfully disagrees with the Applicant that the claims are now in condition for allowance. After conducting a further search of the prior art, the Examiner discovered U.S. 2003/0159111 issued to Fry. It appears that the Fry discloses a cache for temporarily storing transformed XML data as data objects for later reuse (paragraph [0028]).

The Examiner asserts that the combination of Fry and U.S. 2004/0193661 issued to Sikchi et al. discloses and/or suggests each and every element of the Applicant's claimed invention. Therefore, the claims remain rejected under 35 U.S.C. 103(a).

Applicant Argues:

The disclosure in Lipkin and Challenger are limited to a cache monitor for ensuring that cached objects are validated when changes to XML data in the data store are detected by the server.

Examiner Responds:

After reconsidering the prior art in light of Applicant's arguments received 10/24/2007, the Examiner agrees with the Applicant that Lipkin and Challenger are

limited to a cache monitor for ensuring that cached objects are validated when changes to XML data in the data store are detected by the server.

However, the Examiner respectfully disagrees with the Applicant that the claims are now in condition for allowance. After conducting a further search of the prior art, the Examiner discovered U.S. 2004/0193661 issued to Sikchi et al. It appears that the Sikchi et al. discloses a cache monitor for ensuring that cached objects are validated when changes to XML data in the data store are detected by the server (Fig. 5).

The Examiner asserts that the combination of Fry and Sikchi discloses and/or suggests each and every element of the Applicant's claimed invention. Therefore, the claims remain rejected under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 16, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fry (U.S. 2003/0159111) in view of Sikchi (U.S. 2004/0193661).

(Claims 1, 16, and 22)

Fry discloses in figures 1-2, substantially all of the elements, a client-server system capable of validating cached eXtensible Markup Language (XML) data comprising a data store for storing XML data (108, paragraph [0032]); a server for

retrieving and updating XML data in the data store to service client requests (Abstract, paragraph [0015]); a transformation engine for transforming XML data into a format suitable for a client application based on a set of transformation rules (120, 130, paragraph [0049]); a cache for temporarily storing transformed XML data as data objects for later reuse (paragraph [0028]); except a cache monitor for ensuring that cached objects are validated when changes to XML data in the data store are detected by the server; and an object dependency mapper for automatically and continuously determining dependencies between XML data in the data store and sets of transformation rules. Sikchi teaches in figures 1-8, the hierarchical data processing engine 122 determines, for a node of the data file 126, if possible inputs into that node require only a simple change to the rendered form (paragraph [0079]) and this record of the status of the node can be used by the hierarchical data processing engine 122 or the system 100 to determine how to render a change to this node. This record can also include information instructing the hierarchical data processing engine 122 as to which element(s) of a potential rendering file should be changed for an input to this node (paragraph [0084]). It would have been obvious at the time of the invention was made for one person of the ordinary skill in the art to modify the disclosure of Sikchi to determine if possible inputs into the node cause only a simple change to data-entry fields when the transformation file is applied on the data file. A simple change, for example, is one in which data rendered in one data-entry field is the data input into the node.

4. Claims 2-15, 17-21, and 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fry (U.S. 2003/0159111) in view of Sikchi (U.S. 2004/0193661) in further view Challenger (U.S. 6,026,413).

(Claim 2)

Fry and Sikchi disclose in figures 1-2, substantially all of the elements, except an object manager for managing data objects in the cache. Challenger teaches a cache manager (which is an example of an object manager) determines how changes to underlying data affect the values of objects (col. 8, lines 54 +). It would have been obvious at the time of the invention was made for one person of the ordinary skill in the art to modify the disclosure of Sikchi to provide cache manager to determine the changes of the values of objects.

(Claims 3 and 14)

Challenger discloses in figures 33, further comprising a transformation rule alert service for detecting when the transformation rules are modified, added to the system and deleted from the system (col. 29, lines 30 +).

(Claim 4)

Challenger discloses in figures 1, 12, 21 and 33, the server accesses the object manager to generate a response to a client request for data (col. 8, lines 22- +; col. 15, lines 1-44).

(Claim 5)

Challenger discloses the server accesses the cache monitor to validate cached objects when a data update request is received (col. 3, lines 63 +; col. 4, lines 1-10).

(Claims 6, 15)

Challenger discloses in figures 12 and 29, data in the data store is represented as a tree structure having a root node, a plurality of intermediate nodes and leaf nodes, the leaf nodes representing data in the data store; and a transformation rule is a expression describing a path from the root node to a particular node in the tree.

(Claims 7, 8, 18, and 24)

Challenger discloses in figures 1, 12 and 30, a set of the transformation rules constitutes a style sheet; and the transformation engine receives a style sheet and the data tree as input, and outputs a transformed data object (Abstract).

(Claim 9)

Challenger discloses in figures 1, 12 and 29, the object manager uses the transformation engine to generate a new object in response to a client request when the new object does not exist in the cache; and the object manager stores the new object in the cache automatically.

(Claim 10)

Challenger discloses in figures 19, 20, 23, and 25-29, the object manager periodically refreshes the cache and removes the objects that have been flagged as invalid by the cache monitor.

(Claim 11)

Challenger discloses in figures 9-11, the object manager optionally maintains statistical information for each object in the cache, and automatically removes cached objects that are being accessed infrequently by the clients.

(Claims 12, 13, 20, and 26)

Challenger discloses in figures 1, and 2, the object dependency mapper includes a table of dependencies, each dependency associating a transformation rule with the style sheets that include the transformation rule (col. 10, lines 36-42).

(Claims 17 and 23)

Challenger discloses in figures 1, the transformed format is html (col. 10, lines 25-35).

(Claims 19, 21, 25, and 27)

Challenger discloses in figures 1, data is represented as a tree structure having a plurality of nodes; and the cached objects that are affected by the data changes are determined using the tree structure (col. 9, lines 7-25).

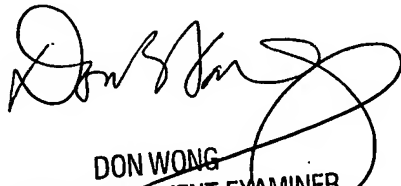
Inquiry

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh V. Ho whose telephone number is 571 272 8583.

The examiner can normally be reached on M-F from 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K. Wong can be reached on 571 272 1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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